CHAPTER I INTRODUCTION



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"We inherited the earth from our forefather; Let us not leave it contaminated for our children and grandchildren..."

--Manivasagam

Environment is the priceless gift of nature and is highly dynamic, multidimensional and interdisciplinary concept which encompasses various elements concerning human settlements like air and land which consequently influences all forms of life in one way or other. Environment has a bundle of resources with support, develop, or enrich human life.

To sustain development large quantity of nature resources are exhosted. This is further compounded by the effects of population explosion.

Nature is a beautiful gift with most diverse, ecological adapted and naturally well managed earth for the survival of all varieties of organism as man has advanced and overpopulated, 'selfish' instinct leading to use of natural resources including living being caused tremendous imbalance in the biological diversity. Several environmental hazards and crisis arise from the deliberate abuse, misuse, and exploitation of nature resources by greedy man. Lithosphere, hydrosphere, energy resources, atmosphere, and space have all been harmfully polluted by human intervention.

Traditional Indian societies have existed in nature. The sun was their god, the earth their mother, they worshiped the river, the tree, and the four

directions. The animals and birds found enlogy in their prayer and poems. 2Much of philosophy, culture, and science were involved in our forest based ashrams before two and a half million years when man started his life; he simply utilized a small portion of god gifted nature resources. As the number increased, his culture and technology being advanced, he modified the natural system into an artificial and highly productive system to get more sources. This leads to enormous exploitation of natural resources and gigantic and unmanageable amount of by-products and wastages, has resulted in today's environmental crisis, which has endangered not only human existence but also the earth.

The planet, earth is the only place where mankind can live. There we find need and care of it. Today, all the countries are facing several hazardous environmental problems. We not only face problems but also create problems to environment. The misuse of environment is the cause for the present "civilization crisis". The quality of life of people considerably declined because of pollution.

Conservation and protection of environment is one of the major challenges the world facing. Only one amicable relationship with nature can save the environment and us. Hence, human beings are asked to reduce recycle and to reuse their resources.

ENVIRONMENTAL EDUCATION: NEED OF THE HOUR

There is an urgent need to create a consciousness of the environment. This is possible through environmental education to a large extent. Environmental education is defined as the process of recognizing values and clarifying concepts related to environment and its problems in order to develop skills and attitudes necessary to understand the environment.

Environmental education is a kind education, which seeks to make students fully aware of the problems connected with the development, initiates them to tackle those problems with a sense to responsibilities and enable them to think and contributes their views and their solutions along with other members of their community. Environmental education is the process recognizing values and clarifying concepts in order to understand the interrelatedness among man, his culture and his biophysical surroundings. India is a fast developing country, but development is necessarily to be related with our endangered environment. Development, environmental education in our country should reach every individual who has a multifaceted role to play as an occupant of a dwelling, a resident in a street, or an inhabitant of a village or town, a native of a district, a citizen of a nation and finally a citizen of the world. The consciousness of both public and legislators must be increased so that they understand the importance of environmental conservation.

Environmental education is the most effective tool for modifying the behaviour of individuals and of the community, and creating a new environment friendly citizenship which man will come to understand his role and responsibilities as a custodian of life on this "spaceship earth".

EMERGENCE OF ENVIRONMENTAL EDUCATION AS A DISTINCT ENTITY

It was only during 70's that it was realized that there was no environmental education program. In this context, it may be rightly called the decade of environmental education when it merged as a distinct entity. The Stockholm conference was the beginning of the dissemination of the ideas on environment. Through the conference newsletter CONNECT which was later followed by the Belgrade International Workshop (1977), the later resulting in a document called 'Tbilisi Declaration'.

GOALS OF ENVIRONMENTAL EDUCATION FORMULATED AND ADOPTED AT THE TBILISI CONFERENCE (UNESCO-UNEP, 1977)

- To foster clear awareness of and concern about economic, social, political and ecological interdependence in urban and rural areas.
- To provide every person with opportunities to acquire the knowledge (values, attitudes, commitment) and skills needed to protect and improve the environment.
- To create new pattern of behaviour of individuals, groups and societies as a whole towards the environment.

OBJECTIVES OF ENVIRONMENTAL EDUCATION ENDORSED AT THE TBILISI CONFERENCE (UNESCO-UNEP, 1977)

AWARENESS: To help social groups and individuals acquire an awareness of end sensitivity to the total environment and its allied problems.

KNOWLEDGE: To help social groups and individuals gain a variety of experiences in, and acquire a basic understanding of, the environment and its associated problems.

ATTITUDE: To help social groups and individuals acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.

PARTICIPATION: To provide social groups and individuals with an opportunity to be actively involved at all levels in working towards resolution of environmental problems.

THE EASY QUESTION: "So what?"

Like the environment itself, environmental education is complex, requiring multi-info applied at multi-levels, using multimedia, and targeting multi-stake holders. Every potential decision that has an environmental impact, whether drinking a cup of water at the micro-level, or targets for global CO_2 reductions, has an element of education and awareness being built in it. In order to draw out and distil the essence of environmental education, we can condense the whole process into a single question, in fact, contains just two words: **SO WHAT?** But this is not the confrontational question "So What?" that demands justifications. Instead it is the short form of three essential questions that start with 'So What?" These three questions around which much of environmental education activities revolve are as follows:

- "So What" is happening?
- "So What" does this mean to me?
- "So What" can I do?
- "So What" is happening?

This is the "So What" question that begins the quest for action. What is happening to the environment around us. Who is doing all those bad things to the environment? The environment around us may be green, but what are the real problems? This is the awareness stage.

"So What" does this mean to me? How does the changing environment affect us? Positively, negatively, and what is the relationship- cause and effectbetween the environment and humans? It is the reflective stage of understanding the cyclic impact of human activities on the environment and vice versa on human health.

ENVIRONMENTAL EDUCATION IN SCHOOLS

To a large extent the rational for environmental education in schools was assumed to be children as future decision makers represent the long term hope for the sustainable use of natural resources and schools offer a worldwide institutional base for mass transmission of the environmental principle.

ENVIRONMENTAL EDUCATION: ACCORDING TO NCF (2005)

• To aware the people about environment is the need of the time for the whole world because the nature is destroyed by the world in a very catastrophic manner. So the curriculum must include the environmental education in such a manner by which it can stuck the minds of every individual and aware and alert them accordingly.

• To aware from the interrelationship of man and his world, the scope of the environment has wider context. Man needs to understand his relationships with various components of environment.

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OUR PRIME RESPONSIBILITY: SUSTAINABLE DEVELOPMENT

With worlds population now over 6 billion and increasing the pressure on our planet, its people and resources are intense. Most people agree that we can not continue to use these resources and abuse our environment as we have done in the past.

Sustainable development is an approach adopted throughout the world to address the potential problems of resources depletion, pollution, and damaged to ecosystem (improving quality) which meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable developments involves using renewable rather than non-renewable energy resources and promoting reuse and recycling to avoid the need for new resources to be exploited.

The earth summit held at Rio-De-Janeiro in 1992 put the world on the path of sustainable development.

TWO ASPECTS OF SUSTAINABLE DEVELOPMENT

1. Intergenerational equality: This emphasized that we should stop over exploitation of resources, reduce water discharge and emissions and maintaining an ecological balance. It expects to hand over a safe, healthy, and resourceful environment to the future generation.

2. Intra-generational equality: This emphasized that technology development should support economic growth of the poor

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countries so as to reduce the weather gas within and between the nations.

MEASURES FOR SUSTAINABLE DEVELOPMENT

- To promote environmental education and awareness.
- Three 'R' approach \rightarrow Reduce, reuse, and recycle.
- Appropriate technology → use of fewer resources and produce minimum waste.
- To utilize resources as per carrying capacity of the environment

ENVIRONMENTAL FRIENDLY BEHAVIOUR OR ECO-FRIENDLY BEHAVIOUR

The main hurdle in tackling the problem of environmental degradation in developing countries like India is not only the lack of scientific knowledge but also the will to act. Under such scenario, the society needs to be educated about the importance of environment and sustainable development for ensuring a better environment for our future generations. Psychology attempts to develop human societies less exploitive in their use of natural resources. The degree of environmental awareness and attitude may determine an individual's ecological behaviour, i.e. actions which contribute towards environment preservation or conservation (AXEL ROD and LEHMAN, 1993). A recent pioneering study has established environmental attitude as a power predictor of ecological behaviour (Kaiser Etal., 1999). The three major components of environmental attitude i.e. affect, knowledge, and intention, may be used in prediction of ecological behaviour.

Eco-friendly is synonymous used to refer good and service laws, guidelines, and policies considered to inflect minimal or no harm on the environment. The term eco-friendly is used to describe activities which are good for the environment. It is a shortening of "ecological friendly". Ecological behaviour may appear to be susceptible to a wild range of influences beyond one's control (Hines Et Al., 1987). For example, cost of water effects, water conservations; Architecture of a home affects energy consumption; political majors promote or demote optimal uses of resources and/or minimal generation of wastes by the society. Thus, socio-cultural constraints may also determine which ecological behaviour is easier to carry out and which is harder. Altruism and environmentalism appeared to be the internal variable that independently influenced pro-environmental behaviour (Clark Et Al., 2003). The actual individual commitment to protect the environment is a function of the level of education, the degree of subjective well being, and to a lesser intent the level of population pressure (Duroy, 2005). Environmental behaviour of the urban people was directly and indirectly under the influence of variable like age, gender, feelings of stress, and preparedness to act of the residents (Kalanteri Et Al, 2007).

A high environmental awareness among the old and young people may motivate them to adopt environmental friendly practices of living such as rational use of natural resources together with minimal generation of wastes. It may include elimination of diseases, poverty, and waste accumulation in conjunction with conservation of natural resources and biodiversity, recycling of wastes and use of alternative source of energy. Such an eco-friendly psyche of people may cause a paradigm shift in their behaviour towards their immediate environment, which may reflect in their ways of utilization of natural resources, generation of wastes and its recycling; approach towards problems of environmental pollution and preservation of natural ecological resources. That in turn may harmonized environment with development.

1.2 NEED OF THE STUDY:

We need environmental education to achieve sustainability, but limited progress has been made. The lack of progress may be due to a lack of vision or awareness, or due to lack of participation in solving environmental problems. In order to attain a sustainable present and future, we have to create awareness and also enhanced the participation of not only student but all the people living on the earth.

There is a broad gap between theory and practical aspect cause of in proper and insufficient guidelines. Knowledge of relationship between theory aspect and practical aspect is lacking due to some irremovable problems in our educational system. The protection and improvement of environment is a major issue today. It is crucial time to create awareness on environmental issues and develop environmental friendly behaviour among every human being.

In this research, researcher wants to relate environmental awareness and eco-friendly behaviour and science education in school.

1.3 STATEMENT OF THE PROBLEM

This study deals with "A Study of Environmental Awareness and Ecofriendly Behaviour of Secondary School Students"



1.4 OPERATIONAL DEFINITION OF VARIABLES

Before preceding further any research, the researcher should have clear understanding of the problem. The term like environmental awareness and ecofriendly behaviour needs special description as they convey different meaning to different people. This may result in ambiguous understanding of the terms, therefore to overcome this problem, the researcher made an attempt to define the term operationally so as to avoid confusion. In the process researcher here under has given the understanding of the term by great personalities in the specific field.

ENVIRONMENT AWARENESS

Environmental awareness is the mirror image of all the knowledge one has after going through rigorous curriculum in the school which provide detailed knowledge about each and every aspect of environment and to aware every aspect of pollution, environmental hazards, and problems of present and future.

Definition of environmental awareness in environmental awareness scale of Hasseen Taj

The environmental awareness is operationally defined as the scores obtained by students on environmental awareness scale of Haseen Taj (HTEAS).

ECO-FRIENDLY BEHAVIOUR

Eco-friendly behaviour is the application of once knowledge into practice such

that after a certain amount of growth and practice one develops in his behaviour contributing in the prevention and control of environmental pollution and hazards.

Definition of eco-friendly behaviour in environmental behaviour scale of Archana Singhal, Urmial Verma, and Pradeep K Singhal.

The Eco-friendly behaviour is operationally defined as the scores obtained by students on environmental behaviour scale of Archana Singhal, Urmila Verma, and Pradeep K Singhal (EBS-svs).

1.5 OBJECTIVES OF STUDY

- 1. To study the current level of environmental awareness of secondary school students.
- 2. To study the current level of eco-friendly behaviour of secondary school students.
- 3. To study the relationship between environmental awareness and ecofriendly behaviour of the secondary school students.
- 4. To study the relationship between science achievement and environmental awareness of secondary school students.
- 5. To study the relationship between eco-friendly behaviour and science achievement of secondary school students.

1.6 HYPOTHESES

1. There is no significant relationship between environmental awareness and eco-friendly behaviour of secondary school students.

- 2. There is no significant difference in environmental awareness between boys and girls of secondary schools.
- 3. There is no significant difference in eco-friendly behaviour of boys and girls of secondary schools.
- 4. There is no significant relationship between science achievement and environmental awareness of secondary school students.
- 5. There is no significant relationship between science achievement and eco-friendly behaviour of secondary school students.

1.7 DELIMITATIONS OF THE STUDY

- 1. The study was restricted to the private English medium schools of Bhopal city at Madhya Pradesh state.
- 2. This study was delimited to students studying in class 9.
- 3. The study was delimited to schools affiliated to CBSE.
- 4. This study was delimited to 280 students.
- 5. This study was restricted to 4 schools.
- 6. Science achievement was chosen for achievement.